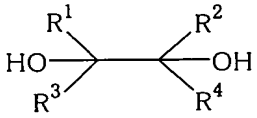
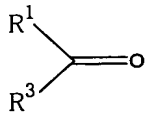
ABSTRACT

There is provided a process for the production of carbonyl compounds, characterized by reacting a diol represented by the formula (1);



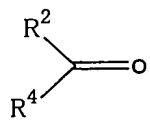
(1)

wherein R^1, R^2, R^3 and R^4 are the same or different, and independently represent a substituted or unsubstituted alkyl group, a substituted or unsubstituted aryl group, a substituted or unsubstituted aralkyl group, a substituted or unsubstituted acyl group, a substituted or unsubstituted alkoxycarbonyl group, a substituted or unsubstituted aryloxycarbonyl group, a substituted or unsubstituted aralkyloxycarbonyl group, carboxyl group or a hydrogen atom, or R^1 and R^2 or R^3 and R^4 are bonded together with the carbon atoms to which they are bonded to form a ring , provided that all of R^1, R^2, R^3 and R^4 are not hydrogen atoms simultaneously; with bromine or an inorganic bromine compound in the presence of a trivalent bismuth compound and a base to form carbonyl compounds represented by the formula (2);



(2)

wherein R^1 and R^3 are as defined above; and the formula (3);



(3)

wherein R^2 and R^4 are as defined above.